

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Paul David Morrison, et al
Serial No.: 09/738,050
Filed: 12/15/00
For: Method and Apparatus for an Interactive Catalog

Group Art Unit: 2174
Examiner: Nguyen

Commissioner of Patents and Trademarks
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SUPPLEMENTAL BRIEF OF APPELLANTS

This SUPPLEMENTAL BRIEF is in response to a Notification of Non-Compliant Appeal Brief mailed October 9, 2007. The status of claims section has been amended to clarify that the appeal is to all pending claims: 1-3, 5-23, 27-31, and 37-45.

This is an appeal from the final rejection of all claims of the Examiner dated June 21, 2007 rejecting claims 1-3, 5-23, 27-31, and 37-45, all of the pending claims in the case. This Brief is accompanied by the requisite fee of \$250 as set forth in §41.20(b)(2).

REAL PARTY IN INTEREST

This patent application is assigned to P.D. Morrison Enterprises, Inc., a Texas corporation.

RELATED APPEALS AND INTERFERENCES

There are no related U.S. appeals, interferences, or judicial proceedings.

STATUS OF CLAIMS

The application was filed on December 15, 2000 as a new utility application with (44) forty-four claims, of which (8) eight were independent claims. (Claims 1, 24, 27, 32, 33, 34, 36, and 42)

An Election was entered on July 6, 2004 for claims 1-23, 27-31, 36-41, and 42-44. (Claims 1, 27, 36, and 42 are the pending independent claims.)

All of the pending claims were rejected in a First Office Action dated August 9, 2005. Claims 1-16, 18-23, 36-40, and 42-44 were rejected under section §102 based on Wical (U.S. Patent No. 6,240,410) and claims 17 and 41 were rejected based on the combination of Wical and Wittenburg (U.S. Patent No. 6,515,656)

On August 9, 2005, in response to the First Office Action, Applicant amended claims 1, 5-7, 19, 36, and 42; cancelled claim 4; and added claim 45.

In the next and Final Office Action, the Examiner rejected all pending claims on November 3, 2005.

Appellant filed a Notice of Appeal on March 2, 2006; a Brief of Appellants on May 2, 2006; and supplemental Briefs on August 14, 2006 and September 12, 2006.

On December 5, 2006 the Examiner issued an Office Action in response to the Appeal Brief.

On April 3, 2007 applicant amended claims 1, 27, and 42. Claim 36 was withdrawn and claims 37-41 were made dependent on Claim 1.

On June 19, 2006 the Examiner issued a Final Office Action which repeated the rejections of December 5, 2006.

The status of the claims as set out in the Final Office action was and is as follows:

allowed claims: none

claims objected to: none

Claims rejected: 1-3, 5-23, 27-31, and 37-45

This appeal is to all pending claims: 1-3, 5-23, 27-31, and 37-45.

STATUS OF AMENDMENTS

On April 3, 2007 applicant amended claims 1, 27, and 42. Claim 36 was withdrawn and claims 37-41 were made dependent on Claim 1. These amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

Overview

The applicant's invention is directed to interactive computer technology and more particularly to method and apparatus for an interactive catalog, such as an office products catalog.

Online or computer-based shopping can be a tedious and difficult activity, especially when there are a large number of products available. Searching for a particular product often requires "drilling down" a web site by clicking on a button on a first page to get to a second page, clicking on a button on a second page to get to a third page, and so on until a page showing the product that is desired appears. If the web site designer cannot anticipate the myriad ways in which different potential customers think of the same product, then the web site can be difficult for the potential customer to navigate.

Many potential customers find paperbound catalogs of products easier to use. Customers can thumb through a paperbound catalog quickly, finding a section that is likely to contain the desired product, and then read a particular page of the catalog to obtain information quickly. A paperbound catalog often contains a table of contents organized by category, an index organized alphabetically, a list of manufacturers organized by company name, and a list of part numbers or product numbers organized numerically. These sections of the paperbound catalog are often cross-referenced to one another and to a page showing a picture of the product.

The current invention provides an electronic catalog that can be used in a manner similar to a paperbound catalog.

The disclosed method and apparatus for an interactive catalog includes a collection of methods that allow a merchant or supplier to organize products in many different ways. Customers can choose various ways to "thumb through" the products. A customer is presented with a row of tabs, referred to as a first tier.

The catalog includes a collection of graphic images for the products available from the merchant or supplier. The graphic images are arranged dynamically into pages as the customer clicks on the various tabs. Each tab has at least one page associated therewith. As the customer clicks on various tabs, the page associated with the tab, or the first page if the tab has several pages associated therewith, is displayed. No matter how

the customer desires to thumb through the catalog, pages are selected to accommodate the customer.

The tabs are dynamically selected. For example, the tabs such as those beginning with the letter “A” may be displayed. As the customer clicks on a tab identifying a category of products, a collection of subcategories of products is displayed. A tab and page for each of the subcategories is presented as the second tier. When the customer clicks on a product category tier tab, a collection of subcategories such as page numbers is displayed as the third tier.

Example

In an office products catalog, the first tier is typically a set of alphabetical tabs where each tab is one or more letters. The tier is scrollable, so that it is not necessary to present all letters on the display screen.

Each tab in the first tier has a collection of categories associated with the tab. When a first tier tab is selected, a second tier of tabs of categories associated with the first tier tab is presented. For instance, if the first tab is the letter “A”, then the second tier categories may include “Adhesives”, and “Art/Drafting”. If the first tier tab is the letter “P”, then categories “Printers”, and “Palettes”, etc. may be presented in the second tier. The second tier is scrollable, and may be presented in the same or different orientation as the first tier.

Each tab in the second tier may have a collection of catalog pages associated with the tab. When a second tier tab is selected, a third tier of tabs of page numbers associated with the second tier tab is presented. For instance, if the selected second tier tab is “Adhesives”, then the third tier includes a tab that is labeled with page numbers of the catalog associated with adhesives. If the tab of the second tier includes a text message, icon, or other graphics image representing art and drafting supplies and is selected, then the third tier includes a tab that is labeled with a page number of the catalog associated with art and drafting supplies. Bottom tier tabs are individually numbered tabs representing individual catalog pages. The third tier is scrollable, and may be presented in the same or different orientation as the first and second tier.

In other examples, there may be fewer or more than 3 tiers of tabs.

Claims References

The following annotated claims indicate figure and reference numbers and/or specification discussion of the claims elements [page:line(s) format]. The claims themselves are generally self-explanatory unless otherwise noted.

1. (General discussion at 4:3 to 9:15) A method for presenting a portion of an electronic catalog database, the method comprising steps of:
 - presenting a first tier of tabs (FIG. 1 #102), each tab (FIG. 1 #110, 111, 112, 114, 116, 118) in the first tier of tabs representing a first collection of data objects corresponding thereto;
 - in response to a selecting of a tab of the first tier to produce a selected first tier tab, presenting a second tier of tabs (FIG. 1 #104), each tab (FIG. 1 #120-128) in the second tier of tabs representing a second collection of data objects, each data object in the second tier also belonging to the first collection of data objects corresponding to the selected first tier tab;
 - in response to a selecting of a tab of the second tier to produce a selected second tier tab, presenting a third tier of tabs (FIG. 1 #106), each tab (FIG. 1 #130-138) in the third tier of tabs representing a third collection of data objects, each data object in the third tier also belonging to the second collection of data objects corresponding to the selected second tier tab, and continuing to present at least a portion of the first tier after the tab of the second tier is selected; and
 - in response to a selecting of a tab of the third tier, displaying a page (shown in FIG. 1 #108) from the electronic catalog database, and continuing to present at least a portion of the first tier and at least a portion of the second tier after the tab of the third tier is selected.
2. The method of claim 1, wherein: the second tier of tabs is not visible until after the selecting of a tab of the first tier. (5:11-12)

3. The method of claim 1, wherein: the second tier of tabs is visible. (FIG. 1 #104)
5. The method of claim 1, wherein: the third tier of tabs is not visible until after the selecting of a tab of the second tier. (7:11-12)
6. The method of claim 1, further comprising a steps of: in response to a selecting of a tab of the third tier to produce a selected third tier tab, presenting a fourth tier of tabs, each tab in the fourth tier of tabs representing a fourth collection of data objects, each data object in the fourth tier also belonging to the third collection of data objects corresponding to the selected third tier tab; and in response to a selecting of a tab of the fourth tier, displaying a page from the electronic catalog database. (10:18 to 11:2)
7. The method of claim 1, wherein the electronic catalog database comprises a plurality of products. (18:3)
8. The method of claim 1, wherein: the presenting the first tier of tabs includes executing a process in a first computer system and displaying the first tier of tabs on a display device of a second computer system; and the selecting of a tab of the first tier to produce a selected first tier tab includes providing a selection of the selected first tier tab to the first computer system. (19:3-10, 38:13-16, 39:10-12)
9. The method of claim 1, wherein: after the selecting of the tab of the first tier to produce the selected first tier tab representing a first collection of data objects, and in response to a selecting of a subsequent tab of the first tier to produce a subsequent selected first tier tab, wherein the first tier includes both the selected first tier tab and the subsequent selected first tier tab; replacing the second tier of tabs with a subsequent second tier of tabs representing a fourth collection of data objects; and replacing the third tier of tabs with a subsequent third tier of tabs representing a fourth collection of data objects. (This updating is described at 27:21 to 28:2, 32:6-10, and 36:10-20)

10. The method of claim 1, further comprising a step of: modifying a browser to perform the presenting the first tier of tabs. (38:17-20)

11. The method of claim 1, further comprising: receiving a scroll input corresponding to at least one of the first tier and the second tier; in response to receiving a scroll input, scrolling the corresponding at least one of the first tier and the second tier. (4:11-15, 6:15-18)

12. The method of claim 1, wherein: at least one of the first tier and the second tier is horizontal. (FIG. 1 and 32:1-3)

13. The method of claim 1, wherein: at least one of the first tier and the second tier is vertical. (32:1-3)

14. The method of claim 1, wherein: at least one of the first tier and the second tier is horizontal and at least one of the first tier and the second tier is vertical. (32:3-5)

15. The method of claim 1, wherein: the form representing the collection of records of tabs is visually scalable. (4:17, 6:20, 9:3, 37:17)

16. The method of claim 1, further comprising a step of: accessing the database over a network. (4:17, 6:20, 9:3, 37:17)

17. The method of claim 16, wherein: accessing the database over a network includes accessing the database over the Internet. (19:5, 38:13-15, 39:10-13)

18. The method of claim 16, wherein: accessing the database includes reading a computer readable medium. (18:20 to 19:2)

19. The method of claim 16, wherein: accessing the database over a network includes accessing a first portion of the database over a network and a second portion of the database over a computer readable medium. (19:11-13, 18:0 to 19:2)

20. The method of claim 16, further comprising: storing the portion of the database locally. (39:22)

21. The method of claim 1, comprising accepting a text input search request from a user; conducting a search and identifying at least one data object that satisfies the search request; identifying at least one data object; determining a second tier of tabs associated with the data object; determining a first set of tabs associated with the data object; and displaying a representation of the data object along with the first set of tabs and the second set of tabs. (9:16 to 10:4)

22. The method of claim 1, comprising presenting a graphic image on at least one of the first tier tabs. (4:8)

23. (Original) The method of claim 1, comprising presenting a graphic image on at least one of the second tier tabs. (8:4)

27. A method for presenting an electronic office products catalog, the method comprising: (FIG. 1 shows an example of a presenting a multi-tier display; FIG. 6 shows example steps in creating the presentation groups; FIG. 7 shows example steps in presenting a portion of the database)
 assigning, for each office product, at least one product category name (21-57);
 assigning, for each product category name, an alphabetic tab, such that the tab corresponds to the first letter of the product category name (FIG 6 Step 318, 24:19-22);
 assigning, for each office product, at least one page number of the electronic catalog where the office product will be displayed (26:1-24);
 assigning, for each product category name, a set of page numbers corresponding to the pages of the electronic catalog at least one office product corresponding to

the product category name will be displayed in the electronic office products catalog (26:1-24);

presenting a first tier of alphabetic tabs, each alphabetic tab displaying at least one letter; (FIG. 1 shows an example of a presenting a multi-tier display)

in response to a selecting of an alphabetic tab, presenting a second tier of product category name tabs, such that a product category name tab is presented for each product category name beginning with the alphabetic letter of the selected alphabetic tab; (FIG. 1 shows an example of a presenting a multi-tier display)

in response to a selecting of a product category name tab, presenting a third tier page number tabs, such that at least one page number tab is presented for each product category name (FIG. 1 shows an example of a presenting a multi-tier display), and continuing to present at least a portion of the first tier of alphabetic tabs after the product category name tab is selected; and

in response to a selecting of a page number tab, displaying the first page represented by the page number tab and continuing to present at least a portion of of the first tier of alphabetic tabs and at least a portion second tier of product category name tabs after the page number tab is selected. (FIG. 1 shows an example of a presenting a multi-tier display).

28. The method of claim 27 comprising scrolling at least one of the alphabetic, product name, or page number tabs. (4:11-15, 6:15-18, 8:20-24, FIG.1)

29. The method of claim 27 comprising in response to a selecting of a product category name tab, presenting a third tier of product sub-category name tabs such that at least one sub-category name tab is presented for each product category name (7:16-23); in response to a selecting of a product sub-category name tab, presenting a fourth tier of page number tabs, such that at least one page number tab is presented for each subproduct category name; and in response to a selecting of a page tab, displaying the first page represented by the page number tab . (36:12-23)

30. The method of claim 27 comprising accessing the electronic office products catalog over a network (39:10-13).
31. The method of claim 27 comprising storing the portion of the database locally. (44:22)
37. The method of claim 1, further comprising a step of: receiving an action from the form. (Step 428, 37:22)
38. The method of claim 37, wherein: the action is a text entry. (38:2)
39. The method of claim 37, wherein: the action is a quantity. (38:3)
40. The method of claim 37, further comprising: in response to receiving an action, generating a record for subsequent action. (38:5)
41. The method of claim 37, further comprising: generating a purchase order in response to receiving the action. (Step 426, 38:5)
42. A method of presenting a plurality of electronic catalogs on a computer workstation, the method comprising
- presenting a menu of electronic catalogs to a user from the workstation; and
 - in response to the selection of a catalog (FIG. 9 #408, 409, 410),
 - (The following steps are shown in FIG 1 and 4:3 to 9:15 as referenced by 45:2-3 :)
 - presenting a first tier of tabs from the selected catalog, each tab in the first tier of tabs representing a first collection of data objects corresponding thereto;
 - in response to a selecting of a tab of the first tier to produce a selected first tier tab, presenting a second tier of tabs from the selected catalog, each tab in the second tier of tabs representing a second collection of data objects, each data object in the second tier also belonging to the first collection of data objects corresponding to the selected first tier tab;

in response to a selecting of a tab of the second tier to produce a selected second tier tab, presenting a third tier of tabs, each tab in the third tier of tabs representing a third collection of data objects, each data object in the third tier also belonging to the second collection of data objects corresponding to the selected second tier tab, and continuing to present at least a portion of the first tier after the tab of the second tier is selected; and

in response to a selecting of a tab of the third tier, displaying a page from the selected electronic catalog and continuing to present at least a portion of the first tier and at least a portion of the second tier after the tab of the third tier is selected.

43. The method of claim 42 comprising displaying a product display page. (Product display page is shown in item 108 display of FIG. 1)

44. The method of claim 42 comprising displaying an index page (42:7-11).

45. (This claim is shown in FIG. 1)

A method for presenting a portion of a database, the database comprising a plurality of data objects, the method comprising steps of:

presenting a first tier (FIG. 1 #102) of graphics images, such that each of the graphics images in the first tier represents a first collection of data objects from the plurality of data objects;

in response to a selecting of a graphics image of the first tier of graphics images, continuing to present the first tier of graphics images (FIG. 1 #102), and presenting a second tier (FIG. 1 #104) of graphics images, such that each of the graphics images in the second tier represents a second collection of data objects from the plurality of data objects, such that the second collection of data objects is a subset of the first collection of data objects; in response to a selecting of a graphics image of the second tier of graphics images,

continuing to present the first tier of graphics images (FIG. 1 #102),

continuing to present the second tier of graphics images (FIG. 1 #104),
 presenting a third tier (FIG. 1 #106) of graphics images, such that each of the
 graphics images in the third tier represents a third collection of data
 objects from the plurality of data objects, such that the third collection of
 data objects is a subset of the second collection of data objects;
 in response to a selecting of a graphics image of the third tier of graphics images,
 continuing to present the first tier of graphics images (FIG. 1 #102),
 continuing to present the second tier of graphics images (FIG. 1 #104),
 continuing to present the third tier of graphics images (FIG. 1 #106), and
 determining whether (10:18 to 11:2)

to present a fourth tier of graphics images such that each of the
 graphics images in the fourth tier represents a fourth collection of
 data objects from the plurality of data objects, such that the fourth
 collection of data objects is a subset of the third collection of data
 objects, or

to present a selected portion of the database.

GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

1. The Examiner has rejected claims 1-16, 18-23, 37-40, and 42-44 under 35 U.S.C. §103 as being unpatentable over Wical (U.S. Patent No. 6,240,410) and Suzuki (U.S. Patent No. 6,798,427).
2. The Examiner has rejected claims 17 and 41 under 35 U.S.C. §103 as being unpatentable over Wical, Suzuki, and Wittenburg (U.S. Patent No. 6,515,656).
3. The Examiner has rejected claims 27-31 under 35 U.S.C. §103 as being unpatentable over Wical, Suzuki, and Bodnar (U.S. Patent Application No. 2001/0000668).

ARGUMENT

Wical teaches a virtual bookshelf system which provides a user a way to browse and locate information associated with a plurality of documents that are classified in a hierarchical structure.

Suzuki presents a method of placing style of rendition icons on musical score. The user may further edit the icons or play the score with the rendition styles selected.

The Examiner's combination of Wical and Suzuki to form an obviousness rejection is common to all of the rejected claims. The following discussions on Suzuki and the combination of Suzuki and Wical relate to all claims.

The Examiner's arguments for combining Wical and Suzuki

The Examiner argues [on pages 12-13 of the Final Office Action] that

- both Wical and Suzuki teach "a graphical user interface for displaying information data in a hierarchical structure that includes a plurality of hierarchical levels based on predefined categories of the information data."
- "In Wical, only a particular path for the hierarchical structure from the highest hierarchical level to a currently selected hierarchical level is displayed to the user."
- "However in Suzuki, all menu options from the highest hierarchical level to a currently selected hierarchical level is displayed to the user."
- "Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the graphical tabs as taught by Suzuki in the invention of Wical in order to provide a visual presentation of all menu options at all levels of the hierarchical structure and to provide a visual presentation of the hierarchical relationship of all menu options at one level to another level."

Applicant's response to the Examiner's arguments for combining Wical and Suzuki

Applicant argues that

- Suzuki is an intensive task management tool that is very different from Wical and very different from the current invention; and
- Suzuki and Wical are not reasonably combined from a field of use or from an architectural perspective.

FIG. 4 is provided as an example of Suzuki's method. The first two measures of score for a single instrument (AltoSax) are presented. Presumably, these two measures are a small portion of the overall score, and there are likely to be additional instruments in the completed score. As discussed below, even for this small section of score, four separate icons have been selected and placed in three different layers. The placement of these four icons required the selection of different "State" tabs and the selection of different "Style of Rendition" tabs. (If the user desired to also place icons for different instruments for these first two measures of score, then the user would actively be selecting tabs from all three rows of tabs.)

Suzuki teaches a task management tool to support the placement of numerous icons on multiple layers for each of several instruments. One aspect of Suzuki's invention is that three rows of tabs are displayed and actively used during this icon selection process.

The combination of Wical and Suzuki is not obvious to one of ordinary skill in the art. The combination is one of apples and oranges from both the subject matter (literature search versus music editing) and from architecture (drill down and display one item of information at a time versus displaying and editing four distinct output screen segments simultaneously).

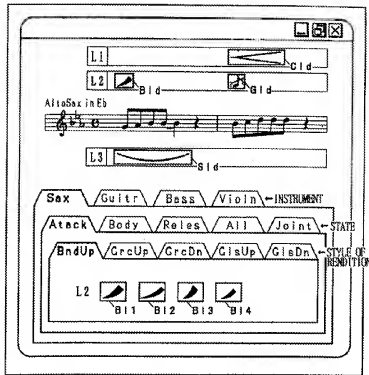


FIG. 4

Analysis of FIG. 4

The upper portion of Suzuki's FIG. 4 displays four separate graphical output display areas:

A section of score for an instrument with two measures (labeled "AltoSax")
[Suzuki 8:59-65]

Layer 1 ("L1"): crescendo and decrescendo;

Layer 2 ("L2"): bend-up, grace-tone-up/down, chromatic up/down, gliss-up/down, staccato, detache, vibrato, bend-downup, shortcut, mute and bend-down; and

Layer 3 ("L3"): tenuto, slur, hammer-on, pull-off and slide-up.

The bottom portion of Suzuki's FIG. 4 displays three rows of tabs with the following current selections:

“Instrument” = SAX

“State” = Attack

“Style of rendition” = BndUp

If a different Instrument tab is selected, the section of score and the layers change. If a different State tab is selected, then icons may be presented for placement on various layers.

At this point in the example, four separate icons have been pasted into the three different layers [Suzuki 9:41 to 10:14]:

Icon	State	Style	Layer
BId	"Attack"	" BndUp "	L2
SId	"joint"	"legato"	L3
GId	"Attack"	"GrcUp"	L2
CId	"all"	"Crscn"	L1

In this example, all of the icons relate to a single instrument- the Sax. Presumably the user has two directions to proceed after placing all of the relevant Sax icons on these first two measures. One direction is to continue to subsequent measures with the Sax, in which case the user will continue to use both the state and style tabs. The other direction is to consider other instruments for these first two measures, in which case the user will use the instrument, state, and style tabs.

Given that the user of Suzuki’s invention is selecting multiple related icons for each segment of musical score, it is logical for a portion of the hierarchical structure to remain on the computer display in order to make the selection of the next icon more efficient.

Suzuki is not a simple display of a “graphical user interface for displaying information data in a hierarchical structure” – it is a very intense and interactive task management program.

In FIG. 4, for example, the selection of a tab from one row affects a different portion of a display than the selection of a tab from another level. This design is in sharp contrast to more classical information management tools where a desired item of information is obtained by drilling down hierarchical structure.

The other tab information is necessary at the time of icon selection because the icon may not have sufficient meaning without reference to the hierarchical structure – i.e. the choices are different depending upon what instrument is selected.

The icon in Suzuki is a starting point for further editing of parameters, Thus the final icon may that is placed on the score may have different properties than the icon that is stored in the hierarchical structure and first displayed tot the user.

Suzuki describes a process that is not limited to computer displays: “Moreover, the style-of-rendition inputting apparatus or electronic music apparatus of the present invention may be a karaoke apparatus, game apparatus, cellular phone or any other type of multimedia equipment.” [Suzuki 5:24-30]

There is no reasonable motivation cited for a person skilled in the art of interactive catalogs to combine Suzuki and Wical.

§103 Rejections – Wical and Suzuki

The current invention provides a convenient and efficient way for a user to find and review pages of an electronic catalog. In the current invention, tiers of tabs are maintained on a display screen so that the user may select a particular page, in a manner similar to a catalog index. For instance, a category of items may be easily selected alphabetically, and catalog pages associated with the category may be directly accessed from the display. The user may then select other catalog pages or other categories without the typical multiple-screen drill down navigation of systems such as taught by Wical. A typical implementation of the current invention is three tiers of tabs- an alphabetic tier, a category tier, and a page tier. These tiers may remain on the display so that the user may make subsequent selections.

By contrast, Wical teaches an extensive drill down approach to locating information from a plurality of documents such as “books, magazines, journals, etc.” [Wical Abstract]. Wical’s FIG. 2f shows an example with 7 levels of categories and

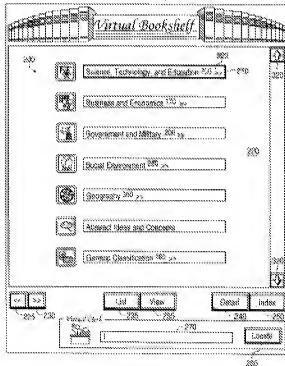
subcategories. After Wical's user has navigated these 7 levels, through multiple computer display screens, the user still has to take an additional step to access a particular page or pages of desired information. The appearance and function of Wical are substantially different from the current invention. Part of this difference relates to the tasks. Wical does not display both complicated navigational history information and ultimate page content on a single display. Wical uses multiple steps of contract and expand buttons to accomplish navigation.

Claims 1, 2, 5, 6, 8, 10, 11, 13, 16, 18, 19, 20, 21, 22, 23

Wical does not teach "presenting a first tier of tabs, each tab in the first tier of tabs representing a first collection of data objects corresponding thereto" as claimed in claim 1. Wical's display includes a "menu of the hierarchies labeled 220 on FIG. 2a." [Wical col 10 line14]

Wical

FIG. 2a



Wical does not teach “in response to a selecting of a tab of the first tier to produce a selected first tier tab, presenting a second tier of tabs, each tab in the second tier of tabs representing a second collection of data objects, each data object in the second tier also belonging to the first collection of data objects corresponding to the selected first tier tab” as claimed in claim 1. After selection, Wical requires a separate action to generate a list of categories in the next lower level:

In a preferred embodiment, **each category name is displayed in a box**, such as box 210 for “science, technology, and education”, for selection by a user. Within the box for a corresponding category, a number, such as the number “760” for the “science, technology and education” category, is displayed. The number indicates the number of documents that relate to the particular category available on the virtual bookshelf. Furthermore, a symbol “>>”, labeled 222 on FIG. 2a, is provided in the box to **indicate that there are lower level hierarchies within the corresponding category**. [Wical col 10, line 27-36]

The example shown in FIG. 2b is generated in response to a user selecting the “science, technology, and education” category **and invoking the expand function via the expand button 230**. In general, when one of the high level knowledge catalog categories are selected for expansion, **a list of categories in the next lower level of the hierarchy for the selected item are displayed**. [Wical col 11, line 65 to col 12, line 4]

Wical teaches “category names” displayed in boxes, and menus or lists of categories.
Wical does not teach tabs or tiers of tabs.

Wical does not teach “in response to a selecting of a tab of the second tier to produce a selected second tier tab, presenting a third tier of tabs, each tab in the third tier of tabs representing a third collection of data objects, each data object in the third tier also belonging to the second collection of data objects corresponding to the selected second tier tab” as claimed in claim 1.

Wical

FIG. 2c

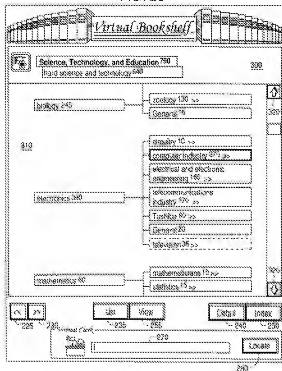


FIG. 2c illustrates further expansion of the virtual bookshelf hierarchy. For the example illustrated in FIG. 2c, the sub category "hard science and technology" was selected, and the **expand action button 230 pressed**. In response, the virtual bookshelf system **displays the first page** of the hierarchical structure for the parent node of "hard science and technology." The hierarchical structure is displayed in a navigation section 310 and a history section 300. The navigation 310 further includes a scroll bar 320 to permit a user to scroll up and scroll down the hierarchy for the "hard science and technology" parent category. **When a category is selected for expansion, the category is added to navigation history, and it is displayed in the history section 300 located**

above the navigation section 310. For the example shown in FIG. 2c, the "science, technology, and education" and "hard science and technology" categories are shown as the parent categories for the selected hierarchy displayed in the navigation section 310. [Wical col 12, lines 11-28]

This description highlights several differences between Wical and the current invention.

- In Wical, the "expand" button is pressed to generate a lower level of categories. The lower level of categories is not generated from simply selecting an upper category item.
- In Wical, the "first page" of the hierarchical structure is displayed rather than a tier of tabs, and a scroll bar is provided for scrolling up or down the hierarchy.
- In Wical, once a category is selected, it is moved to a separate history section rather than remaining in the same place in the navigation section.

Wical does not teach "in response to a selecting of a tab of the third tier, displaying a page from the electronic catalog database" as claimed in claim 1. Wical uses a "knowledge catalog" to generate an ontology, but Wical does not describe representing knowledge from catalogs. Wical does not teach searching or displaying electronic catalogs. The examiner argues that in Wical Fig. 2c, "a page from electronic catalog database is displayed in 310 when a tab is selected." As described in the excerpt above, this page is not the content of an electronic database- it is a portion of the hierarchical structure generated by Wical.

The system described by Wical is not suited to a tiered display because of the variable levels of the hierarchical structure. Since different categories may have different levels of classifications, Wical adopts an approach that indicates with the ">>" symbol, that there are categories below the current level:

Each ontology contains a plurality of levels that form the hierarchical structure. **For example, a "business and industry" static ontology contains three levels of concept classifications under the**

highest level concept, and "economics" contains four levels of concept classifications. The actual configuration, structure and orientation of a particular ontology is dependent upon the subject matter or field of the ontology. Therefore, each ontology in the set of static ontologies contain a different point of view. **The different points of view for the static ontologies result in different approaches or different ways of viewing the knowledge concepts in the different static ontologies. Consequently, the organization of the knowledge concepts in each ontology is not consistent.** As is explained below, the different points of view for the ontologies permit viewing or browsing "like" forms of knowledge with "unlike" forms of knowledge in the virtual bookshelf. [Wical col 7, lines 43-59]

Claim 1 and its dependent claims are not anticipated by Wical. No element of claim 1 is taught by Wical.

Claim 3

Claim 3, "The method of claim 1, wherein: the second tier of tabs is visible" is not anticipated by Wical. As shown in Wical's Figs 2a-2f, the menus or lists of categories are not displayed until a higher level category is selected.

Claim 7

Claim 7, "The method of claim 1, wherein the electronic catalog database comprises a plurality of products" is not anticipated by Wical. The examiner cites Fig 4b, a listing of books, as precedent for this claim. Wical does not teach selling these books, or any other product. The current invention embodiment (beginning page 4, line 1) "Screen For Searching and Purchasing Products using the Online Catalog" describes searching and ordering tangible products.

Claim 9

Wical does not teach "replacing the second tier of tabs with a subsequent second tier of tabs representing a fourth collection of data objects; and replacing the third tier of tabs with a subsequent third tier of tabs representing a fourth collection of data objects" as

claimed in claim 9. As described above, Wical teaches multiple steps of expansion and contraction of categories to search a new area.

Claims 12, 14

Wical does not teach “wherein: at least one of the first tier and the second tier is horizontal” as claimed in claim 12. Wical does not teach “wherein: at least one of the first tier and the second tier is horizontal and at least one of the first tier and the second tier is vertical” as claimed in claim 14. Wical shows single categories as horizontal text or boxes, but does not show multiple categories displayed horizontally.

Claim 15

Wical does not teach “wherein: the form representing the collection of records of tabs is visually scalable” as claimed in claim 15. The Examiner cites the expand and contract functions as precedent for scaling, but Wical describes these functions as moving to different category levels.

“In accordance with one embodiment of the present invention, the first tier 102 is visually scalable. In other words, as the user enlarges or reduces the size of the first tier 102, the size of the tabs enlarges or reduces as well. In accordance with another embodiment of the present invention, the first tier 102 is visually stretchable in at least one direction. In other words, as the user enlarges or reduces the size of the first tier 102 in a first direction, the size of each tab remains unchanged and number of tabs of the first tier 102 that is visible increases or reduces.” [Current Invention, Page 4, liens 16-21]

Claims 37-40

Wical does not teach “receiving an action from the form” as claimed in claim 37.

Wical does not teach “wherein: the action is a text entry” as claimed in claim 38.

Wical does not teach “wherein: the action is a quantity” as claimed in claim 39.

Wical does not teach “in response to receiving an action, generating a record for subsequent action” as claimed in claim 40.

At step 428, an action is received from the form. The action is, for example, a clicking on a radio button. If desired, the action may be a text entry into a dialog box, a striking of a key on a keyboard, a moving of a mouse, or a receiving of another hardware or software signal. In accordance with one embodiment of the present invention, the action is a text entry. In accordance with one embodiment of the present invention, the action is an entry of a quantity. For example, if a customer wishes to purchase ten items of a product, then the customer may enter “10” into a dialog box. At step 426, a purchase order is generated in response to receiving the action. [Current invention, page 37, line 22 to page 38, line 6]

Claims 42-44

Wical does not teach “A method of presenting a plurality of electronic catalogs on a computer workstation” as claimed in claim 42.

Wical does not teach “presenting a menu of electronic catalogs to a user from the workstation” as claimed in claim 42.

As described in the claim 1 discussion above, Wical does not teach presenting tiers of tabs in order to present a catalog page.

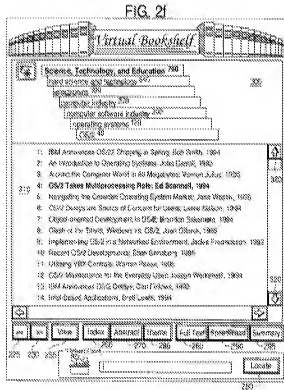
Wical does not teach “displaying a product display page” as claimed in claim 43.

Wical does not teach “displaying an index page” relating to an electronic catalog as claimed in claim 43.

Claim 45

Wical does not teach “continuing to present the first tier of graphics images” or “continuing to present the second tier of graphics images” as claimed in claim 45.

Wical



Wical teaches a bookshelf system for browsing information where only a portion of the hierarchical structure may be displayed. As illustrated by FIG. 2f, this portion of the structure represents the path “from the highest hierarchical levels to the hierarchical level of the match category” [Wical Abstract] This path does not include displaying tiers of tabs. Claim 45 recites three tiers of graphics images, where the first and second tiers of graphics images remain viewable as the user makes selections. Support for this claim is shown in FIG. 1 of the current application where the first tier of tabs and the second tier of tabs remain visible as the third tier of tabs is displayed and a third tier tab is selected.

\$103 Rejections- Wical, Suzuki, and Wittenburg

Claim 17

The references of Wical, Suzuki, and Wittenburg are not reasonably combined to form an obviousness rejection of claim 17. Wical teaches a bookshelf system for browsing

information, while Wittenburg teaches a multimedia presentation such as online shopping.

Claim 41

Although Wittenburg teaches Internet commerce, none of the cited references teach the generation of a purchase order as claimed in claim 41.

§103 Rejections- Wical, Suzuki, and Bodnar

Claims 27-31

None of the cited references (Wical, Suzuki, and Bodnar) teach or suggest “a method for presenting an electronic office products catalog” as claimed in claim 27.

As illustrated below, Bodnar, FIG. 8E teaches displaying tabs representing the first letter or letters of person names. Bodnar does not teach multiple levels of tabs related to an electronic catalog for products.

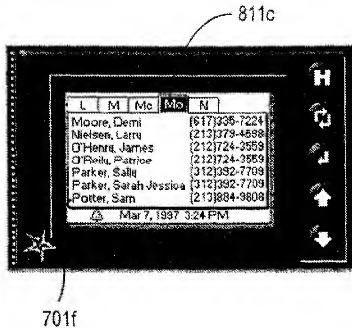


FIG. 8E

Neither Wical nor Bodnar teach “displaying the first page represented by the page number tab” as claimed in claim 27.

The references of Wical and Bodnar are not reasonably combined to form an obviousness rejection for claims 27-31. Wical teaches a bookshelf system for browsing information, while Bodnar teaches a portable computing device with about 7 lines of display. Claims 27-31 of the current application relate to a method for presenting an electronic office products catalog.

Bodnar teaches a dynamic tab splitting method which teaches away from the multi-tiered tab display of the current invention:

82. The foregoing example illustrated a scenario where simple category headings sufficed. At times, however, a simple category heading might not provide sufficient detail. Consider a scenario when the user has navigated to a category having “M” entries only to find that a very large number of “M” entries exist. In an electronic address book, it is not uncommon to find, for example, a large number of “Mc” entries. FIG. 8A illustrates this scenario. Here, the user has tabbed to a category including “M” entries. For the interface 700 (now 700c), this is shown at tab 801. As a

result of having selected tab 801, the list 701 (now 701c) is updated and, for this example, includes a large number of "M" entries. To drill down into these entries, the user clicks the select key, shown at 805.

83. In response to this action, the interface 700 (now 700d) updates, as indicated in FIG. 8B. Note particularly that the category tab has, in effect, "split" into subcategory tabs. For instance, "M" entries are now represented by three tabs 811: "M," "Mc," and "Mo" tabs. Here, since there are a great number of "Mc" entries, the system has synthesized dynamically an "Mc" tab, so those entries have their own subcategory tab. In this fashion, the user can quickly navigate to a particular subcategory of interest, thereby avoiding the need to linearly scan through a subcategory having a large number of entries which are not of interest (e.g., "Mc" entries)."[Bodnar Paragraphs 82-83]

Applicant respectfully argues that all pending claims are in condition for allowance.

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Respectfully submitted,

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CLAIMS APPENDIX

The following are the claims on appeal:

1. (Previously Amended) A method for presenting a portion of an electronic catalog database, the method comprising steps of:
 - presenting a first tier of tabs, each tab in the first tier of tabs representing a first collection of data objects corresponding thereto;
 - in response to a selecting of a tab of the first tier to produce a selected first tier tab, presenting a second tier of tabs, each tab in the second tier of tabs representing a second collection of data objects, each data object in the second tier also belonging to the first collection of data objects corresponding to the selected first tier tab;
 - in response to a selecting of a tab of the second tier to produce a selected second tier tab, presenting a third tier of tabs, each tab in the third tier of tabs representing a third collection of data objects, each data object in the third tier also belonging to the second collection of data objects corresponding to the selected second tier tab, and continuing to present at least a portion of the first tier after the tab of the second tier is selected; and
 - in response to a selecting of a tab of the third tier, displaying a page from the electronic catalog database, and continuing to present at least a portion of the first tier and at least a portion of the second tier after the tab of the third tier is selected.
2. (Original) The method of claim 1, wherein: the second tier of tabs is not visible until after the selecting of a tab of the first tier.
3. (Original) The method of claim 1, wherein: the second tier of tabs is visible.
4. (Cancelled)

5. (Previously presented) The method of claim 1, wherein: the third tier of tabs is not visible until after the selecting of a tab of the second tier.
6. (Previously presented) The method of claim 1, further comprising steps of: in response to a selecting of a tab of the third tier to produce a selected third tier tab, presenting a fourth tier of tabs, each tab in the fourth tier of tabs representing a fourth collection of data objects, each data object in the fourth tier also belonging to the third collection of data objects corresponding to the selected third tier tab; and in response to a selecting of a tab of the fourth tier, displaying a page from the electronic catalog database.
7. (Previously presented) The method of claim 1, wherein the electronic catalog database comprises a plurality of products.
8. (Original) The method of claim 1, wherein: the presenting the first tier of tabs includes executing a process in a first computer system and displaying the first tier of tabs on a display device of a second computer system; and the selecting of a tab of the first tier to produce a selected first tier tab includes providing a selection of the selected first tier tab to the first computer system.
9. (Original) The method of claim 1, wherein: after the selecting of the tab of the first tier to produce the selected first tier tab representing a first collection of data objects, and in response to a selecting of a subsequent tab of the first tier to produce a subsequent selected first tier tab, wherein the first tier includes both the selected first tier tab and the subsequent selected first tier tab: replacing the second tier of tabs with a subsequent second tier of tabs representing a fourth collection of data objects; and replacing the third tier of tabs with a subsequent third tier of tabs representing a fourth collection of data objects.
10. (Original) The method of claim 1, further comprising a step of: modifying a browser to perform the presenting the first tier of tabs.

11. (Original) The method of claim 1, further comprising: receiving a scroll input corresponding to at least one of the first tier and the second tier; in response to receiving a scroll input, scrolling the corresponding at least one of the first tier and the second tier.
12. (Original) The method of claim 1, wherein: at least one of the first tier and the second tier is horizontal.
13. (Original) The method of claim 1, wherein: at least one of the first tier and the second tier is vertical.
14. (Original) The method of claim 1, wherein: at least one of the first tier and the second tier is horizontal and at least one of the first tier and the second tier is vertical.
15. (Original) The method of claim 1, wherein: the form representing the collection of records of tabs is visually scalable.
16. (Original) The method of claim 1, further comprising a step of: accessing the database over a network.
17. (Original) The method of claim 16, wherein: accessing the database over a network includes accessing the database over the Internet.
18. (Original) The method of claim 16, wherein: accessing the database includes reading a computer readable medium.
19. (Previously presented) The method of claim 16, wherein: accessing the database over a network includes accessing a first portion of the database over a network and a second portion of the database over a computer readable medium.
20. (Original) The method of claim 16, further comprising: storing the portion of the database locally.

21. (Original) The method of claim 1, comprising accepting a text input search request from a user; conducting a search and identifying at least one data object that satisfies the search request; identifying at least one data object; determining a second tier of tabs associated with the data object; determining a first set of tabs associated with the data object; and displaying a representation of the data object along with the first set of tabs and the second set of tabs.
22. (Original) The method of claim 1, comprising presenting a graphic image on at least one of the first tier tabs.
23. (Original) The method of claim 1, comprising presenting a graphic image on at least one of the second tier tabs.
24. (Withdrawn)
25. (Withdrawn)
26. (Withdrawn)
27. (Previously Amended) A method for presenting an electronic office products catalog, the method comprising:
- assigning, for each office product, at least one product category name;
 - assigning, for each product category name, an alphabetic tab, such that the tab corresponds to the first letter of the product category name;
 - assigning, for each office product, at least one page number of the electronic catalog where the office product will be displayed;
 - assigning, for each product category name, a set of page numbers corresponding to the pages of the electronic catalog at least one office product corresponding to the product category name will be displayed in the electronic office products catalog;
 - presenting a first tier of alphabetic tabs, each alphabetic tab displaying at least one letter;

in response to a selecting of an alphabetic tab, presenting a second tier of product category name tabs, such that a product category name tab is presented for each product category name beginning with the alphabetic letter of the selected alphabetic tab;

in response to a selecting of a product category name tab, presenting a third tier page number tabs, such that at least one page number tab is presented for each product category name, and continuing to present at least a portion of the first tier of alphabetic tabs after the product category name tab is selected; and

in response to a selecting of a page number tab, displaying the first page represented by the page number tab, and continuing to present at least a portion of the first tier of alphabetic tabs and at least a portion second tier of product category name tabs after the page number tab is selected.

28. (Original) The method of claim 27 comprising scrolling at least one of the alphabetic, product name, or page number tabs.

29. (Original) The method of claim 27 comprising in response to a selecting of a product category name tab, presenting a third tier of product sub-category name tabs such that at least one sub-category name tab is presented for each product category name; in response to a selecting of a product sub-category name tab, presenting a fourth tier of page number tabs, such that at least one page number tab is presented for each subproduct category name; and in response to a selecting of a page tab, displaying the first page represented by the page number tab.

30. (Original) The method of claim 27 comprising accessing the electronic office products catalog over a network.

31. (Original) The method of claim 27 comprising storing the portion of the database locally.

32. (Withdrawn)

33. (Withdrawn)

34. (Withdrawn)

35. (Withdrawn)

36. (Withdrawn)

37. (Previously Amended) The method of claim 1, further comprising a step of:
receiving an action from a form of selectable graphics images representing a
collection of records of the database.

38. (Original) The method of claim 37, wherein: the action is a text entry.

39. (Original) The method of claim 37, wherein: the action is a quantity.

40. (Original) The method of claim 37, further comprising: in response to receiving an
action, generating a record for subsequent action.

41. (Original) The method of claim 37, further comprising: generating a purchase order in
response to receiving the action.

42. (Previously Amended) A method of presenting a plurality of electronic catalogs on a
computer workstation, the method comprising
presenting a menu of electronic catalogs to a user from the workstation; and
in response to the selection of a catalog,
presenting a first tier of tabs from the selected catalog, each tab in the first tier
of tabs representing a first collection of data objects corresponding thereto;
in response to a selecting of a tab of the first tier to produce a selected first tier
tab, presenting a second tier of tabs from the selected catalog, each tab in the
second tier of tabs representing a second collection of data objects, each data
object in the second tier also belonging to the first collection of data objects
corresponding to the selected first tier tab;

in response to a selecting of a tab of the second tier to produce a selected second tier tab, presenting a third tier of tabs, each tab in the third tier of tabs representing a third collection of data objects, each data object in the third tier also belonging to the second collection of data objects corresponding to the selected second tier tab, and continuing to present at least a portion of the first tier after the tab of the second tier is selected; and

in response to a selecting of a tab of the third tier, displaying a page from the selected electronic catalog and continuing to present at least a portion of the first tier and at least a portion of the second tier after the tab of the third tier is selected.

43. (Original) The method of claim 42 comprising displaying a product display page.

44. (Original) The method of claim 42 comprising displaying an index page.

45. (Previously presented) A method for presenting a portion of a database, the database comprising a plurality of data objects, the method comprising steps of:

presenting a first tier of graphics images, such that each of the graphics images in the first tier represents a first collection of data objects from the plurality of data objects;

in response to a selecting of a graphics image of the first tier of graphics images, continuing to present the first tier of graphics images, and presenting a second tier of graphics images, such that each of the graphics images in the second tier represents a second collection of data objects from the plurality of data objects, such that the second collection of data objects is a subset of the first collection of data objects;

in response to a selecting of a graphics image of the second tier of graphics images,

continuing to present the first tier of graphics images,
continuing to present the second tier of graphics images,

presenting a third tier of graphics images, such that each of the graphics images in the third tier represents a third collection of data objects from the plurality of data objects, such that the third collection of data objects is a subset of the second collection of data objects;

in response to a selecting of a graphics image of the third tier of graphics images, continuing to present the first tier of graphics images, continuing to present the second tier of graphics images, continuing to present the third tier of graphics images, and determining whether

to present a fourth tier of graphics images such that each of the graphics images in the fourth tier represents a fourth collection of data objects from the plurality of data objects, such that the fourth collection of data objects is a subset of the third collection of data objects, or

to present a selected portion of the database.

EVIDENCE APPENDIX

RELATED PROCEEDINGS APPENDIX